

PORT OF BARRY

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Annual Report

OF THE

Port Medical Officer

TO THE

Port Health Authority

for the Year 1937

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By

E. I. DAVIES, M.B., B.S. (Lond.), D.P.H.

Port Medical Officer



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## BARRY PORT HEALTH COMMITTEE.

CHAIRMAN: MR. W. H. BUTCHER.

MRS. M. HOLLAND.

ALD. MRS. D. M. REES.

MR. W. T. ACE, J.P.

MR. D. J. BOON, J.P.

MR. C. B. GRIFFITHS, O.B.E.

MR. DUDLEY HOWE, J.P.

DR. P. W. KENT.

MR. W. R. LEE, J.P.

MR. F. A. SHARP.

### PORT HEALTH STAFF.

PORT MEDICAL OFFICER:

E. I. DAVIES, M.B., B.S. (Lond.), M.R.C.S., L.R.C.P., D.P.H.

DEPUTY PORT MEDICAL OFFICER:

J. B. S. MORGAN, M.B., B.Ch., B.Sc. (Wales), L.R.C.P., M.R.C.S., D.P.H. (*Left 31/8/37*).

W. E. THOMAS, M.B., B.Ch., B.Sc. (Wales), L.R.C.P., M.R.C.S., D.P.H. (*Commenced 1/9/37*).

INSPECTORS.

D\*X CHIEF INSPECTOR: CHARLES HOCKLEY.

\*X J. H. LEWIS.

c J. T. EVANS.

W. J. HOPKINS.

RAT CATCHER: H. PROSSER.

x Holds the Sanitary Inspector's Certificate granted by the Royal Sanitary Institute.

\* Holds the Meat Inspector's Certificate granted by the Royal Sanitary Institute.

and Holds the Diploma of the Sanitary Inspector's Association.

c Holds the Sanitary Inspector's Certificate granted by the Sanitary Inspector's Association Examination Board.



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*To the Chairman and Members of the Barry Port Health Authority.*

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have the honour to present to you my third Annual Report upon the work of the Port Health Authority during 1937.

This work whilst little known to the general public, is however of vital importance from the standpoint of preventing the entrance of dangerous infectious disease into this Country. Fortunately, no case or suspected case of one of the five major diseases occurred during the year, and the amount of sickness landed from vessels was small. The total number of cases of transmissible disease landed being twenty-seven, of which eight were labelled Malaria, all of whom were removed to hospital.

As this disease is protean in its manifestations, a provisional diagnosis only can be made on board a ship. Experience of tropical disease shows that to clinch the diagnosis, a prolonged search of the blood picture is frequently required. A "touch of ague" is a convenient ailment complained of by persons who have travelled abroad. Before a definite label is given to the disease microscopical examination of the blood to discover the parasite in acute cases, and other variations from the normal picture in chronic cases is required. In each vessel instructions were given as to preventive measures against Malaria.

The Port Sanitary Regulations 1933, relating to the Deratisation of ships has reduced to an extraordinary degree the rat population compared with even ten years ago. The complete extermination of this rodent is an almost impossible task owing to the rate of re-production. Much has been accomplished, but the war against the rat must be continued.

In conclusion, I desire to thank the Chairman and Members of the Port Health Authority for the courtesy with which they have considered my suggestions and recommendations, also my sincere thanks to the Chief Inspector, Mr. Charles Hockley, who has furnished me with the necessary figures on which this Report is based.

Your obedient servant,

E. I. DAVIES.

*Port Medical Officer.*

# PORT HEALTH AUTHORITY OF BARRY.

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## REPORT FOR THE YEAR 1937

BY THE  
PORT MEDICAL OFFICER.

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This is the 49th Annual Report on the work of the Barry Port Health Authority.

The Report covers the work of the Authority during the year and is prepared on the lines indicated in the Memorandum 204/SA issued by the Ministry of Health to Port Health Authorities.

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### JURISDICTION OF THE PORT.

The limits of jurisdiction of the Port Health Authority are as follows:—

“A straight line drawn due South from the seaward extremity of the common boundary of the Parishes of Sully and Lavernock, and to the boundary of the said port, a straight line drawn due South from the seaward extremity of the common boundary of the Parishes of St. Athans and Llantwit Major, to the boundary of the said port, and a line co-incident with that part of the boundary of the said port which lies between the points at which the straight line hereinbefore mentioned meet such boundary together with the waters of the said port of Cardiff within such limits, and the place or places for the time being appointed as the Customs Boarding Station or Stations for such part of the said port, and every place for time being for the mooring and anchoring of ships for such part of the said port, under regulations for the prevention of the spread of diseases issued under the authority of the Statutes in that behalf, and the docks, basins, harbours, creeks, rivers, channels, roads, bays, and streams belonging to such part of the said port.”

The contributing Riparian Authorities are the Cardiff Rural District Council, and the Cowbridge Rural District Council. The boundary of the district therefore extends from a point at Swanbridge immediately opposite the eastern side of Sully Island to a point approximately one mile West of the Leys. The latter position is known as Penry Bay.

The Medical Officer to the Port Health Authority desires to express his appreciation for the assistance received from H.M. Customs Officers, the Officers of the Great Western Railway Docks Authorities, the Harbour Master and the Pilots, who have co-operated in the maintenance of Public Health and the prevention of disease in the port.

E. I. DAVIES,  
*Port Medical Officer,  
Port Health Authority.*

APRIL, 1938.

TABLE A shows the amount of shipping entering the port during the year 1937. It will be noted that there was a considerable increase in the total number of vessels dealt with, both in number and tonnage.

	Number.	Tonnage.	Number Inspected.		No. reported to be defective.	No. of vessels on which defects were remedied	No. of Vessels Reported as having, or having had during the Voyage Infectious Disease on Board.
			By the Medical Officer of Health.	By the Sanitary Inspector.			
FOREIGN.—							
Steamers ....	1,066	1,377,990	31	1,066	244	244	6
xMotors ....	10	39,248	1	10	2	2	—
Sailing ....	2	4,632	—	2	1	1	—
Fishing ....	—	—	—	—	—	—	—
Total Foreign	1,078	1,421,870	32	1,078	247	247	6
COASTWISE.—							
Steamers ....	2,712	2,165,475	9	1,984	201	201	16
xMotors ....	61	11,820	1	61	6	6	—
Sailing ....	9	304	—	9	—	—	—
Fishing ....	—	—	—	—	—	—	—
Total Coastwise	2,782	2,177,599	10	2,054	207	207	16
Total Foreign and Coastwise	3,860	3,599,469	42	3,132	454	454	22

x Includes mechanically propelled vessels other than steamers.



TABLE II.—Ships Inspected during 1937.

Table II shows the nationality of ships inspected during the year, and it will be seen that approximately two-thirds are British ships, the remainder being vessels of all nationalities, the highest proportion of which are French, followed mainly by Norwegian, Greek, and Esthonian. Therefore, all sorts and conditions of ship construction and sanitary arrangements are met with at the Port of Barry. This adds considerable difficulty in dealing with ship sanitation. The instructions issued by the Board of Trade in regard to the Survey of Master and Crew Spaces apply only to British ships, so that no structural alterations can be enforced on Foreign owned vessels.

Nationality.				Motor and Steam.	Sail.	Total.
Belgian	....	....	....	22	—	22
British	....	....	....	2,005	10	2,015
Chinese	....	....	....	2	—	2
Danish	....	....	....	65	—	65
Dutch	....	....	....	19	—	19
Egyptian	....	....	....	4	—	4
Esthonian	....	....	....	110	—	110
Finnish	....	....	....	43	2	45
French	....	....	....	359	—	359
German	....	....	....	15	—	15
Greek	....	....	....	124	—	124
Hungarian	....	....	....	1	—	1
Icelandic	....	....	....	5	—	5
Italian	....	....	....	13	—	13
Japanese	....	....	....	4	—	4
Latvian	....	....	....	14	—	14
Norwegian	....	....	....	164	—	164
Panama	....	....	....	1	—	1
Portuguese	....	....	....	13	—	13
Russian	....	....	....	7	—	7
Spanish	....	....	....	43	—	43
Swedish	....	....	....	57	—	57
Yugo-Slavian	....	....	....	30	—	30
Total	....	....	....	3,120	12	3,132

## II.—CHARACTER OF TRADE OF PORT.

### TABLE III.

TABLE B.—(Ministry of Health).

(a) PASSENGER TRAFFIC DURING 1937.

No. of Passengers.	1st Class.	2nd. Class.	3rd Class.	Transmigrants.
Inwards ....	—	—	—	—
Outwards ....	—	—	—	—

(b) CARGO TRAFFIC.

As in the case of Table A, Imports and Exports are considerably higher than the previous year. The high import being due to a large increase in pitwood and mining timber. The high export for 1937 was almost solely due to coal and coke, approximately 1½ million more tons of coal being exported.

The figures here given indicate the nature and amount of trade done.

The Imports and Exports for the years 1936 and 1937 are as follows:—

					IMPORTS.	
					1936.	1937.
Timber and Deals	....	....	....	....	16,401 tons.	13,095 tons.
Pitwood and Mining Timber	....	....	....	....	152,359 "	221,677 "
Grain and Flour	....	....	....	....	144,537 "	145,113 "
Oil	....	....	....	....	151 "	465 "
General Merchandise	....	....	....	....	3,286 "	8,940 "
Building Sand	....	....	....	....	4,694 "	16,350 "
Ballast	....	....	....	....	1,450 "	2,200 "
Coal	....	....	....	....	— "	—
Iron, Steel and Pig Iron	....	....	....	....	— "	—
Total Imports	....	....	....	....	322,878 tons.	407,840 tons.
					EXPORTS.	
					1936.	1937.
Coal and Coke	....	....	....	....	4,780,630 tons.	6,272,984 tons.
Tinplates	....	....	....	....	6,281 "	3,309 "
Cement	....	....	....	....	105,719 "	71,244 "
Grain and Flour	....	....	....	....	33,843 "	33,366 "
Oil	....	....	....	....	4,904 "	4,210 "
General Merchandise	....	....	....	....	12,773 "	13,366 "
Ballast	....	....	....	....	1,450 "	2,200 "
Patent Fuel	....	....	....	....	— "	—
Iron and Steel Rails and Ironwork	....	....	....	....	1,885 "	8,311 "
Total Exports	....	....	....	....	4,947,485 tons.	6,408,990 tons.
Total Imports and Exports					5,270,363 tons.	6,816,830 tons.

COUNTRIES WITH WHICH THE PORT PRINCIPALLY TRADES. The Port principally trades with France, Spain, Italy, Germany, Belgium, Scandinavia and the Mediterranean Ports; River Plate Ports and occasionally with India and Australia; London, Liverpool and other home ports.

### III. SOURCES OF WATER SUPPLY.

(a) FOR THE PORT. Drinking water is supplied by the town, an analysis of which can be seen under Sanitary Circumstances of Barry, under heading of Water Supply.

(b) FOR SHIPPING. The same supply as in (a) is used for shipping.

(c) NUMBER OF WATER BOATS AND THEIR SANITARY CONDITION. There are no water-boats in use in the Port.

Thirty-six samples of water were taken from ships supplied.

In each case where the water was found unsatisfactory the tanks were emptied and cleansed before taking a fresh supply of water on board.

TABLE IV.

RESULTS OF BACTERIOLOGICAL EXAMINATION OF WATER SUPPLIES FROM SHIPS.

Number of Samples.	Satisfactory.	Moderate Purity.	Doubtful Purity.	Contaminated.
36	27	7	2	—

### IV. PORT SANITARY REGULATIONS, 1933.

#### (1). ARRANGEMENTS FOR DEALING WITH DECLARATIONS OF HEALTH.

All Pilots immediately on boarding any foreign going vessel approaching the Port, shall hand the Master a form of declaration of Health (P.S.1.)

#### (2). BOARDING OF VESSELS ON ARRIVAL.

Vessels arriving from infected ports or having infectious disease on board, are boarded by the Port Medical Officer or his Deputy and one of the Port Health Inspectors. All other vessels are boarded on arrival at the Lady Windsor Lock by one of the Port Health Inspectors.

#### (3). NOTIFICATION TO THE AUTHORITY OF INWARD VESSELS REQUIRING SPECIAL ATTENTION.

Pilots, and the Officers of H.M. Customs, are regularly supplied by the Port Health Authority with lists of ports where dangerous epidemic disease is known to exist,

#### (4). MOORING STATIONS DESIGNATED UNDER ARTICLE 10.

##### (a) WITHIN THE DOCKS.

The berth at No. 21 Buoys, No. 1 Dock is allocated as an internal mooring station but in the event of the berth being occupied, the Great Western Railway Co. will afford every facility at some other point within the Docks.

## (b) OUTSIDE THE DOCKS.

This matter was discussed with the Ministry of Health, H.M. Customs Chief Officer, The Harbour Master, a Senior Pilot, and the Port Medical Officer, and finally it was left to the discretion of the Medical Officer as to its suitability or otherwise.

## (5). PARTICULARS OF ANY STANDING EXEMPTIONS FROM THE PROVISIONS OF ARTICLE 14.

(1) Where a ship (whether a foreign-going or not) arrives in a district from a foreign port and it appears to the Customs Officer from answers to questions in a declaration of health or from answers to enquiries made by him or otherwise—

(a) that during the voyage (or, where the voyage has lasted more than six weeks, during the last six weeks) there has been on the ship a death from illness suspected to be of an infectious nature or a case of such illness; or

(b) that the ship has called at a port or seaboard included in the list referred to in Article 11; or

(c) that during the voyage (or, where the voyage has lasted more than six weeks, during the last six weeks) plague has occurred or been suspected amongst rats and mice on the ship or sickness or death not attributable to poison or other measures for destruction has occurred amongst the rats or mice on the ship.

he shall direct that the ship shall be taken to and detained at a mooring station unless the medical officer or other authorised officer of the sanitary authority otherwise allow.

(2) The medical officer may also direct that a ship arriving from a foreign port shall be detained for medical examination, and may hand a notice in writing to that effect to the customs officer who, if he is the first officer to visit the ship, shall deliver the notice to the master.

No Standing Exemption under this Article was issued during the year.

## (6). EXPERIENCE OF WORKING OF ARTICLE 16.

During the year in no case was it necessary to enforce the provisions of this Article.

## (7). ARRANGEMENTS FOR MEDICAL INSPECTION.

(a) PREMISES AND WAITING ROOMS.

Port Medical Officer's Office, Port Health Inspectors' Office.

(b) CLEANSING AND DISINFECTION.

The Port Health Officers undertake the disinfection of infected quarters, and infected bedding is removed to the Public Health Centre for steam disinfection.

Verminous persons are removed by ambulance to the Public Health Centre where they are bathed, and their clothing and other articles are disinfected by steam.

(c) Premises for the temporary accommodation of persons for whom such accommodation is required for the purposes of the Regulations. There is none.

(d) Hospital accommodation available for Plague, Cholera, Yellow Fever, Small Pox and other infectious diseases.

(i) *Cholera, Yellow Fever and Plague.*

Arrangements have been made for the treatment of persons suffering from Plague, Cholera, and Yellow Fever at the Council's Isolation Hospital, Weycock Road. This Hospital is also used for cases of Small Pox. No other types of infectious disease are dealt with at this Institution.



(ii) *Diphtheria and Scarlet Fever.*

Cases of Diphtheria and Scarlet Fever occurring in the Port are removed to the Infectious Diseases Hospital of the Barry Urban District Council.

(iii) *Small-pox and Chicken-pox.*

Cases of small-pox and chicken-pox occurring in the Port of Barry, are removed to the Small Pox Hospital of the Barry Urban District Council.

(iv) *Other Infectious Diseases.*

On account of the fact that there are no cubicle wards in the Barry Infectious Diseases Hospital, the Council have made arrangements with the Cardiff City Council to receive patients suffering from diseases of the enteric group, cerebro-spinal meningitis, acute poliomyelitis, encephalitis lethargica, erysipelas, and meningitis other than tubercular.

The charge for these cases being based on the cost per patient day for each previous year. For 1937 this worked out at 9/7d. per patient day.

Other cases of infectious sickness landed from vessels, such as dysentery, malaria, influenza, pneumonia and measles are admitted to the Royal Hamadryad Seamen's Hospital, Cardiff.

Cases of scabies are treated at the Public Health Centre.

(e) *AMBULANCE TRANSPORT.*

A motor ambulance for Infectious Disease is provided by the Barry Urban District Council. A charge of 10/6 for removal of a case from the vessel to Hospital in the area, and for removal to hospital outside the Urban area a charge of 1/9d. per mile.

(f) *SUPERVISION OF CONTACTS.*

Contacts if allowed to remain on the ship are kept under daily observation by the Port Medical Officer. If after examination they are permitted to proceed to their own homes, their names and addresses are taken and notification is sent to the Medical Officer of Health of the district to which they are going.

(8). *BACTERIOLOGICAL EXAMINATION OF:—*

- (1) Rats for Plague.
- (2) Other bacteriological or pathological examinations.

This work is carried out at the Cardiff and County Public Health Laboratory, The Parade, Cardiff.

(9). *TREATMENT OF VENEREAL DISEASE.*

*Arrangements for the Detection and Treatment of Venereal Diseases amongst Seamen.*

Careful inquiry is always made of the responsible officers of ships relating to the possibility of cases of venereal disease amongst the crew, and leaflets with full directions are distributed to masters of vessels.

The following table gives details relating to treatment of Venereal Disease during the year.

SEAMEN TREATED AT VENEREAL DISEASES CLINIC, 1937.

1937.	Syphilis.	Soft Chancre.	Gonorrhoea.	Non-Venereal.	Totals.
<b>CASES.</b>					
Total ....	54	4	40	5	103
New ....	28	2	19	5	54
<b>ATTENDANCES.</b>					
Total ....	357	9	319	10	695
New ....	125	7	89	10	231



## INFECTIOUS DISEASE.

TABLE V.

TABLE C. (Ministry of Health).

CASES OF INFECTIOUS SICKNESS LANDED FROM VESSELS, 1937.

Disease.	Number of cases during 1937.		No. of Vessels concerned.	Average No. of Cases for previous five years.
	Passengers.	Crew.		
Erysipelas ....	—	1	1	0.284
Chicken Pox ....	—	—	—	0.040
Diphtheria ....	—	—	—	0.121
Dysentery ....	—	—	—	0.204
Enteric ....	—	—	—	0.564
Influenza ....	—	9	6	1.919
Malaria ....	—	8	4	1.691
Measles ....	—	1	1	0.208
Pneumonia ....	—	1	1	0.411
Tuberculosis ....	—	—	—	1.06
Venereal Disease ....	—	6	2	1.459
Scabies ....	—	1	1	0.245

TABLE VI.

TABLE D. (Ministry of Health).

CASES OF INFECTIOUS SICKNESS OCCURRING ON VESSELS DURING THE VOYAGE, BUT DISPOSED OF PRIOR TO ARRIVAL.

Disease.	Number of cases during 1937.		No. of Vessels concerned.	Average No. of Cases for previous five years.
	Passengers.	Crew.		
Enteric ....	—	2	2	0.458
Influenza ....	—	1	1	0.773
Malaria ....	—	4	1	1.031
Mumps ....	—	—	—	0.081
Plague ....	—	—	—	0.071
Pneumonia ....	—	1	1	0.241
Small Pox ....	—	—	—	0.184
Tuberculosis ....	—	—	—	0.409
Venereal Disease ....	—	—	—	0.386
Dysentery ....	—	—	—	0.644
Chicken Pox ....	—	5	1	1.00

## V. MEASURES AGAINST RODENTS.

Detailed information regarding deratisation of ships, and methods of fumigation is given in my Report for 1936.

The figures relating to rat destruction, deratisation certificates, deratisation exemption certificates issued during the year can be found in Tables 10 and 11.

Measures of rat destruction on vessels during the year are given in Table 12.

Continuous measures against rat prevalence of premises in the vicinity of the docks, on quays, wharves, warehouses, etc., are carried out.

Investigation into the percentage of rat infested ships was carried out during the year, with the following results:—

No. of times fumigated in 10 year period.	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Once ... ..	5	7	28	159	148	181	138	154	108	85	125
Twice ... ..	...	...	...	15	6	24	7	14	2	2	2
Three or more times	...	...	...	3	3	3	...	1	...	...	...

In the case of vessels fumigated only once, it appears that these are vessels that call very infrequently at this port, and are therefore no criterion as to their rat state.

When more than one fumigation has been carried out, particularly in one year, I am of opinion that this can be laid down to several causes.

1. CONVENIENT RAT HARBOURAGES.—In the older ships, the structure is such that permanent rat harbourage exists in several parts of the vessel. Many of these vessels are still running and as is well known during the slump period in shipping, many were sold to foreign buyers, and little or no effort has been made by these owners to bring the ships up to date by removing as far as practicable certain permanent rat harbourages, or by rat proofing.

2. FUMIGATIONS.—It is acknowledged that fumigations are not 100% certain, with the consequent result that breeding commences immediately fumigations are completed. Possibly a longer exposure and a repeat fumigation will bring a considerable improvement.

3. CARGOES.—It is obvious that the type of cargoes has much to do with the incidence of rats, and it does appear that where grain and such cargoes are shipped, rats are present in large numbers on land adjoining the wharves, so that a combination of numerous rats plus the opportunity of plenty of food lends itself to considerable rat infestation.

4. CLEANLINESS OF VESSELS.—Certain foreign vessels make a practice of carrying live animals, and the storage of hay and fodder lends itself to opportunities for rats to nest in the vicinity. In addition, very little care is taken to maintain a satisfactory standard of cleanliness in places where animals are kept.

GENERAL.—(a) In the case of new vessels, permanent rat harbourage does not exist to the same extent as in the older vessels, but there is still room for improvement, and I feel that the Board of Trade should exercise still more stringent measures in order to practically eliminate harbourages as they have already suggested.

On the other hand, it is of little value for this country to carry out such improvements as suggested, if the system is not internationally applied.

(b) PERCENTAGES.—The percentage of ships on which rats were recovered after fumigation, taking 10 yearly period, was 2.9%, the percentage of heavily infested ships being 0.79% (heavy infestation refers to ships where 40 rats or more were recovered).

Generally speaking it can be said that rats are more often discovered in vessels that are (a) traditionally dirty, (b) ships that carry yellow crews, and (c) ships where no messrooms are provided.

The percentages of rat infested vessels arriving from (a) foreign, and (b) coastwise, during the past seven years are as follows:—

Vessels arriving from foreign....	....	....	9.29%
Vessels arriving coastwise ....	....	....	0.57%

TABLE VII.

RATS DESTROYED DURING 1937. TABLE E. (Ministry of Health).

## (1). ON VESSELS.

Number of Rats.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total in Year.
Black Rats ...	262	129	339	401	10	230	302	142	442	163	358	216	2,994
Brown Rats ...	—	8	—	—	—	—	—	—	41	93	—	7	149
Species not recorded	16	17	4	8	—	—	—	—	—	—	—	—	45
Rats examined ...	28	24	52	44	7	19	41	24	54	40	22	30	385
Rats infected with Plague ...	—	—	—	—	—	—	—	—	—	—	—	—	—

TABLE VIII.

TABLE F. (Ministry of Health).

## (2). IN DOCKS, QUAYS, WHARVES AND WAREHOUSES.

Number of Rats.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total in Year.
Black Rats ...	1	2	1	—	—	1	—	—	2	—	1	—	8
Brown Rats ...	3	7	8	10	5	16	1	2	14	5	6	11	91
Species not recorded	—	—	—	—	—	—	—	—	—	—	—	—	—
Rats examined ...	1	3	3	4	2	12	3	2	8	5	5	2	50
Rats infected with Plague ...	—	—	—	—	—	—	—	—	—	—	—	—	—

## VI. HYGIENE OF CREWS' SPACES.

All ships are inspected by the Sanitary Inspectors of the Port Health Authority as soon as possible after berthing.

Inquiries are made as to the occurrence of any cases of sickness during the voyage, or if any member of the crew is at present sick or suffering from venereal disease, rat prevalence and rat mortality, the source of the water supply, cleansing of tank and bilges, and all matters affecting the health of the crew.

The living quarters are inspected, and in the event of any defects, notices are served requiring the necessary remedial work to be carried out.

There is still room for improvement of crews' living spaces in the average type of tramp steamers. The problem of living quarters for the crews is a difficult one, because the limited space available has to be utilised as fully as possible for economic reasons, nevertheless, it is pleasing to note that several shipowners have introduced extensive reforms in their new ships, showing new lines of development.

It has been stated that acceleration of the building of merchant vessels is urgently required. If so, the replacement of old ships by new ones built on the lines indicated in the recent Board of Trade Instructions would alleviate the conditions under which the British seaman is expected to live and work. The observance of the rules of personal hygiene cannot be expected from the crew unless marked improvement of the facilities and environment for cleanliness are provided. The problem no doubt is mainly one of economics, resolving itself into the question of money, added weight, and more space.



TABLE IX.

TABLE J. (Ministry of Health). CLASSIFICATION OF NUISANCES.

Nationality of Vessels.	No. inspected during 1937.	Defects of original construction.	Structural Defects through wear and tear.	Dirt, Vermin and other conditions prejudicial to health.
British ....	2,015	—	21	237
Other Nations ....	1,117	—	19	217

## VII. FOOD INSPECTION.

## 1.—ACTION TAKEN UNDER:—

The Public Health (Imported Food) Regulations, 1925-1933.

The Public Health (Imported Milk) Regulations, 1926.

The Public Health (Preservatives, etc., in Food) Regulations, 1927.

During the year 145,113 tons of grain as compared with 144,537 tons for 1936 were imported. (There were twenty-nine cargoes from foreign ports, and twenty-five from home ports). 20 tons 17 cwts. of grain was discovered unfit for milling and destroyed.

Considerable quantities of foreign and chilled meat which arrived by rail for storage in the Cold Stores were inspected during the year, and found to be in good condition.

No cargo of foreign or chilled meat was imported during the year.

## 2.—SHELLFISH.

There are no shellfish beds or layings within the jurisdiction of the Port Health Authority.

## 3.—NUMBER OF SAMPLES OF FOOD EXAMINED BY:—

(a) *Bacteriologist.*

Nature of Sample	} NIL.
Result of Examination	

(b) *Analyst.*

Nature of Sample	} NIL.
Result of Examination	

## VIII. OTHER INSPECTIONS.

(a) *Factories and Workshops.*

The Port Health Inspectors made frequent inspections of the sanitary conveniences on the dockside during the year. All nuisances discovered have been reported upon and the remedial work carried out. The conditions from a public health point of view are satisfactory.

(b) *Foreign Animals Orders 1910-1919.*

These orders prohibit the importation of animals into British home ports, scheduled ports, and countries, and also provide for the disinfection and cleansing of vessels on which animals are carried.

One hundred and eighty-three dogs, 116 cats, 1 sheep, 1 pig, 1 bear, 2 love-birds and 2 parrots were brought to the port on vessels.



(c) (*Parrots Prohibition of Import*) Regulations, 1930:

PSITTACOSIS.

The Parrots (Prohibition of Imports) Regulations, 1930, are still in force, and during the year 1937, the number of orders issued was **four**.

The Port Health Authority enforce the Regulations, Sections 4 and 5 which state as follows—

SECTION 4. A person shall not import any † Parrot into England or Wales whether for sale or otherwise:

Provided that nothing in these regulations shall be deemed to prohibit the importation of any parrot which is proved to the satisfaction of the Port Medical Officer to be required for purposes of medical or veterinary research, or which is consigned to the Zoological Society of London or to a person for the time being specially authorised by the Minister (Health) to import parrots otherwise than for sale.

SECTION 5.

The master of every ship approaching any port shall, if he has reason to believe that a parrot is on board, bring these regulations to the notice of the person having the custody or control of the parrot, and shall immediately on the arrival of the ship notify the proper officer of Customs and Excise accordingly.

† "Parrot" means a bird of the order Psittaciformes, and includes any of the birds commonly called parrots, parrakeets, love-birds, macaws, cockatoos, conures, caiques, lories and lorikeets.

It is perhaps not generally realised that since the epidemic of 1930 died down, cases of Psittacosis have been occurring in this Country. Although the number of cases have not been many, it is significant that there should be any at all. The epidemic eight years ago was due to the introduction into this country of diseased birds from South America. This disease has been observed in the birds mentioned in the above order †, and is characterised by Enteritis and Scepticæmia. Psittacosis may be contracted by man from parrots and other Psittacide. In the human subject the disease is characterised by headache, fever, vomiting, diarrhoea and frequently broncho-pneumonia, and is accredited to infection from Avian sources. The above regulations therefore are important in order to minimise or exclude the risk of spread of the disease.

(d) *Dangerous Drugs Acts* 1920 and 1923.

Two certificates for supply of scheduled drugs under these Acts were issued during the year.

Finally, I append a short article on "Port Sanitation" which appeared under the heading National Health Campaign in the local press.

**PORT SANITATION.**

Every port, or groups of neighbouring ports, are under the jurisdiction for purposes of health of a port sanitary authority, now re-named Port Health Authority under the Public Health Act, 1936. The whole of the coast line and the shores of navigable rivers in England and Wales are included in either a Port Sanitary District or a Riparian Sanitary District. These authorities are responsible for preventing the importation of infectious sickness from abroad, for supervision of the hygiene of ships lying within their district, for the inspection of imported food, and for the general sanitary administration of the area under their control.

In olden days, ships, their passengers and crew, coming from places that were believed to be infected with disease, were isolated for forty days and forty nights—hence the word quarantine. This precaution, no doubt, served to stay the march of pestilence and plague. To-day our precautions, although adequate are not so stringent. The earliest quarantine laws against plague date back as far as the year 1348, when this disease was present in epidemic form in Europe. The old system of quarantine however, imposed severe burdens on trade, and on crews and passengers of ships. With the advance of knowledge of epidemic diseases, the present day method replaced gradually the old system, commencing about the middle of the nineteenth century.

The present day methods depend mainly upon the fact that information relating to the prevalence of five deadly types of infectious disease throughout the world is collected by the Health Office of the League of Nations at Geneva and the Office International d'Hygiene Publique at Paris. This is circulated weekly to Port Health Authorities, thus enabling the Port Medical Officer to prepare a list of all ports both abroad and at home where there may be a case or cases of one of these diseases, viz.: Plague, Cholera, Yellow Fever, Typhus Fever and Small Pox. It is interesting to note that the Port Health Authority at Barry was constituted in the year 1893. The boundary of the district extends from a point at Swanbridge immediately opposite the eastern side of Sully Island to a point approximately one mile west of the Leys. The latter position is known as Penry Bay which is situated near an old Roman Camp, where at one time was found a pier for boarding vessels.

Incidentally, during the year 1893, a Cholera epidemic was spreading over the Continent of Europe, and fears were then entertained of its introduction into Barry owing to constant commercial intercourse with several continental sea-ports. Special precautions were taken to prevent the introduction of this disease into the port. Eventually in 1896 arrangements were made for the treatment of Cholera, Plague and Yellow Fever at the hospital on the Flat Holm. The Flat Holm hospital was discarded in 1936 as modern methods of isolation and segregation of these diseases proved its purpose obsolete and unnecessary.

Another disease which receives international attention is plague, and as it is by means of rats that bubonic plague is propagated, this rodent has received a prominent place in the International Sanitary Convention of Paris, 1926. As a result, vigorous action has been taken to reduce the rat population of all ships by fumigation with Hydrogen Cyanide or Sulphur Dioxide. Barry became a Scheduled Port under Article 28 of the International Convention in 1929. Statistics prove at Barry that the number of rats found in both British and foreign vessels calling at the port is only a small proportion of the number found ten years or more ago.

Whilst on this question of rats, I should like to point out that the campaign should also be conducted on shore, in stores, warehouses, and in private dwellings. The rats, both black and brown, should be attacked periodically and persistently, especially during their non-breeding season in the winter months. They should be destroyed by dogs and ferrets; by trapping; and by all sorts of poisons. The poison must be varied week by week. Rats get to know which poison gave their brothers the stomach-ache last week, so that changes should be rung on the poisons that are employed.

E. I. DAVIES,

M.B., B.S. (Lond.), D.P.H.

October, 1937.

TABLE X.

TABLE G. (MINISTRY OF HEALTH).

Measures of Rat Destruction on Plague "infected" or "suspected" Vessel or Vessels from plague infected ports arriving in the Port during the year.

Total Number of such Vessels arriving.	Number of such Vessels fumigated by SO <sub>2</sub>	Number of such Vessels fumigated by HCN.	Number of Rats killed.	Number of such Vessels on which trapping, poisoning, &c., were employed.	Number of Rats killed.	Number of such Vessels on which measures of Rat destruction were not carried out.
1.	2.	4.	3.	6.	7.	8.
—	—	—	—	—	—	—

TABLE XI.

TABLE H.\* (MINISTRY OF HEALTH).

Deratisation Certificates and Deratisation Exemption Certificates issued during the year.

NET TONNAGE.	No. of Ships.	No. OF DERATISATION CERTIFICATES ISSUED.					No. of Deratisation Exemption Certificates Issued.	Total Certificates Issued.
		After fumigation with		After Trapping, Poisoning, etc.	Total.			
		H.C.N.	Sulphur.			H.C.N. and Sulphur.		
1.	2.	3.	4.	5.	6.	7.	8.	9.
Ships up to 300 tons	9	—	—	—	—	—	9	9
" from 301 tons to 1,000 tons	88	—	2	—	—	2	86	88
" from 1,001 " 3,000 "	169	8	63	—	—	71	98	169
" from 3,001 " 10,000 "	104	6	45	—	—	51	53	104
" over 10,000 tons	—	—	—	—	—	—	—	—
TOTALS	370	14	110	—	—	124	246	370

\* Applicable only to those Ports approved by the Minister of Health for the issue of Deratisation Certificates and Deratisation Exemption Certificates in accordance with the provisions of Article 28 of the International Sanitary Convention, 1926. (Form Port 11).

TABLE XII.

Measures of Rat Destruction on Vessels during the year.

Number of Vessels fumigated by SO <sub>2</sub>	Number of dead Rats recovered.	Number of Vessels fumigated by HCN.	Number of dead Rats recovered.	Number of Vessels fumigated by H.C.N. and Sulphur.	Number of dead Rats recovered.	Number of Vessels on which trapping, poisoning, &c., were employed.	Number of dead Rats recovered.
1.	2.	3.	4.	5.	6.	7.	8.
110	2,747	14	348	—	—	2	93









